

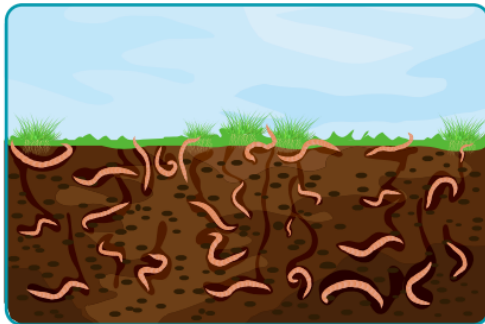
National Curriculum programme of study:

Pupils should be taught:

- Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.
- Describe in simple terms how fossils are formed when things that have lived are trapped within rock.
- Recognise that soils are made from rocks and organic matter.

'Sticky' Knowledge

- Rock is a naturally occurring material.
- There are different types of rock e.g. sandstone, limestone, slate etc. which have different properties.
- Rocks can be hard or soft.
- They have different sizes of grain or crystal.
- They may absorb water.
- Rocks can be different shapes and sizes (stones, pebbles, boulders).
- Soils are made up of pieces of ground down rock which may be mixed with plant and animal material (organic matter).
- The type of rock, size of rock pieces and the amount of organic matter affect the property of the soil.
- Some rocks contain fossils.
- Fossils were formed millions of years ago.
- When plants and animals died, they fell to the seabed. They became covered and squashed by other material. Over time the dissolving animal and plant matter is replaced by minerals from the water.



Rock can be broken down into small pieces called **sediment** by forces of nature like wind, rain, rivers, animals and plants.

Soil is made from **grains** of sediment, organic matter, water and air. Soil contains different sized grains of sediment:

- Clay (smallest).
- Silt (medium).
- Sand (largest).

Key Vocabulary

rock	A solid mineral material forming part of the surface of the earth.
pebble	A small stone made smooth and round by the action of water or sand.
stone	A hard, solid rock used to make structures
grain	A rock piece that is less than a few millimetres in diameter.
crystals	A solid object with a special arrangement of their tiny building blocks (atoms).
granite	A strong, hard rock made of tiny crystals that can be polished to shine.
stale	A type of rock that has been squished and pressed over time
texture	How something feels when you touch it or how it looks
fossil	The remains or traces of plants and animals that lived a very long time ago.
soil	The ground cover where plants grow, made of tiny pieces of rock, air, water and dead plants and animals.
peat	A type of soil made of dead plants that have not completely rotted.

Prior Knowledge

In Year 1, children explored what different objects were made of. In Year 2, children expanded on this to test the uses and purposes of different materials.

Future Learning:

In UKS2 children will understand the process of fossilisation in more detail and how the Earth has evolved over time.

Rocks are formed in different ways and from different mixtures of minerals, other rocks and **organic materials**. This means their appearance and physical properties can vary.